## **MECHANIC STUDY GUIDE**

# Front End, Suspension & Steering Systems

Automobile & Light Truck Repair

Listed below are a number of items and subjects which make up the mechanic certification test identified above. An individual's ability to pass the certification test will depend upon the amount of knowledge the person has concerning these items. **NOTE**: There could be up to 5 additional pre-test questions. These questions will not count but may be used on a later version of the test. Your answers to these pre-test questions will not affect your score. Since you won't know which they are, you should answer all questions.

#### Alignment Diagnosis - 34%

"Toe" adjustment procedures
Caster adjustment procedures for various
suspension systems
Camber understanding
Camber adjusting procedures for various
suspension systems
Total alignment procedures
Caster understanding
Strut suspension alignments

### Tire Wear Diagnosis - 10%

Tire wearing angles
Inside tread wear only
Cupping
Feathered outside edge wear
Wear on both inside & outside of tire

## **Suspension Diagnosis - 18%**

Ball joint diagnosis
Measuring curb height
Torsion bar remove & replace
Ball joint remove & replace procedure
MacPherson suspensions
Automatic leveling systems

### **Steering Diagnosis - 18%**

Rack & pinion diagnosis
Power assist diagnosis
Tie rod end diagnosis
Steering gear adjustment
Steering linkage diagnosis
Power steering system bleeding

## **Driveability Diagnosis - 16%**

Pulling diagnosis
Road crown compensation
Wandering or darting diagnosis
Shimmy & bounce diagnosis
Steering wheel centering

#### Miscellaneous - 4%

Brake rotor R & R precautions Wheel bearing adjustment

#### **SAMPLE QUESTION:**

A car has excessive lean on turns (body roll). This could be caused by:

- A. Bad shocks.
- B. Worn sway bar bushings.
- C. Weak springs.
- D. All of the above.

ANSWER: D